



HOW MANY STEPS DO YOU TAKE EACH DAY?

Areas of interaction:
Environments, Health and social education

It is very important to be active in order to stay fit and healthy.

Have you ever wondered how many steps you take each day?

ESTIMATING YOUR NUMBER OF STEPS

Before we estimate how many steps we take each day, we will first measure the number of steps it takes to walk a distance of 100 metres.

What to do:

- 1 Measure out a distance of 100 metres of your school grounds using a trundle wheel.
- 2 Count the number of steps it takes you to walk the 100 metres.

This gives you an estimate of the number of steps you take for each 100 metres that you walk.

You can use this to find how many steps you take when walking other distances. For example, if you took 125 steps to walk 100 metres, then to walk 200 metres you would take $2 \times 125 = 250$ steps.



NUMBER OF STEPS EACH MINUTE

Sometimes it is easier to imagine walking for a certain period of time, rather than a certain distance. For this reason we will now measure the number of steps we take each minute.

What to do:

- 3 Walk for a period of one minute while a friend times you. Count the number of steps you take in this time. This gives you a measure of the number of steps you take each minute when you walk.
- 4 Repeat step 3, but this time run at the speed that you would usually exercise or play sport. This will give you a measure of the number of steps you take each minute when you run.

You can use these figures to find how many steps you take when walking or running for longer periods of time. For example, if you took 100 steps per minute when walking, then when you walk for 5 minutes you would take $5 \times 100 = 500$ steps.

ESTIMATING YOUR DAILY STEPS

We will now use these figures to estimate the number of steps we take each day.

What to do:

- 5 Consider the activities that make up your typical day. Estimate either how much walking time is spent on that activity, or the distance travelled performing that activity, whichever is easier. Use the results you obtained in 2, 3 and 4 to estimate the number of steps taken to perform each activity. Set out your results in a table like the one below. Some example activities have been entered for a person who walks 100 metres in 125 steps, walks at 100 steps per minute, and runs at 150 steps per minute:

Activity	Time	Distance	Pace	Number of steps
Getting ready for school	20 minutes	500 m	walking	$20 \times 100 = 2000$
Walking to school			walking	$5 \times 125 = 625$
Playing football at recess	15 minutes		running	$15 \times 150 = 2250$
⋮	⋮	⋮	⋮	⋮
Total number of steps				

- 6 How many steps do you take each day? It is estimated that girls should take approximately 12 000 steps each day, and boys should take approximately 15 000 steps each day. How does your estimate compare with these numbers?

DISCUSSION

- Compare your step count with your classmates.
- Why do you think the required number of steps per day is higher for boys?
- Do you think you would take more steps on the weekend than you do during the week?

STRATEGIES TO INCREASE YOUR STEP COUNT

If your estimated numbers of steps each day is below the required number, there are many simple things you can do every day to increase your step count.

What to do:

- 7 Consider the following strategies. Based on your previous results, estimate the number of steps that each strategy would add to your step count.
- a If you are driven to and from school, you could be dropped off 500 metres from your school and walk the rest of the way. The same could be done when you are collected from school.
 - b If you catch the bus to school, you could get off a stop earlier and walk the rest of the way. You could also get off a stop earlier on your way home.
 - c You could organise to play sport with your friends for 30 minutes during lunch.
 - d You could take a 20 minute walk with your parents every day after dinner.
 - e If you use an elevator, you could take the stairs instead.
- 8 Would you be able to increase your step count to the required amount by using some of these strategies?
- 9 Think of some other ways to increase your step count.

RESEARCH

- Research the potential health risks for a person who is not active enough.
- A **pedometer** is a small device used to count the number of steps you take. If you have access to a pedometer, wear one for a week and record the number of steps you take each day. Compare the results with the estimate you obtained in 5.